

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1 to 4.

The above amendment is responsive to points set forth in the Official Action.

In this regard, the main claim 1 has been amended so as to:

- (i) define that components (C) and (E) should be separate components;
- (ii) exclude "benzophenone" from component (E). (In this regard, in the present specification, "benzophenone" is exemplified not only as component (C) (see page 9, line 23), but also as component (E) (see page 21, line 8). From this, it is clearly noted that the object of the incorporation of component (E) and that of (C) differ from each other, and that components (C) and (E) are separate components. In order to clearly resolve any issue of exemplifying the same compound as more than one component, the above amendment is made and it supports the fact that components (C) and (E) are separate components); and
- (iii) limit the content of component (C) to 0.5 - 5% wt%.

The significance of these amendments will be discussed in further detail below.

Claims 1 to 4 have been rejected under 35 USC § 103(a) as being unpatentable over Kashio (US 5,688,632).

This rejection is respectfully traversed.

Kashio's disclosure of benzophenone teaches present component (C), however, since benzophenone is excluded from present component (E), it does not teach present component (E). Therefore, Kashio fails to teach the existence of present component (E).

Furthermore, Kashio fails to teach or suggest that the addition of the present component (E) in the range of a specified small amount (0.01 - 0.3 wt%) to the photosensitive resin composition having therein a photoinitiator (present component (C)), which is a separate component from component (E), provides the unexpected result of increased depth of non-printing areas in a photosensitive resin plate. In Kashio, benzophenone is merely exemplified as a photoinitiator.

The Official Action states that Kashio teaches that the amount of the photoinitiator would be in the range of 0.01 - 10% wt%. However, Kashio actually teaches the photopolymerization initiator in a narrow range of 0.8 - 1.6 wt% (i.e. about 1% in Example 1; 0.8 wt% in Example 2; about 1.6 wt% in Example 3; and about 1.1 wt% in Example 4) based on the total solids (corresponding to component (A) - (E) in the present invention) of the composition. Therefore, those skilled in the art would not be motivated by Kashio to use component (E) in the specific small amount (0.01 - 0.3 wt%) as presently recited to increase the depth of the non-printing area.

In view of the above, claim 1, and claims 2-4, all of which depend on claim 1, are unobvious from Kashio.

Claims 1-4 are rejected under 35 USC § 103(a) as being unpatentable over Pine (US 4,361,640) in view of Matsubara et al. (US 5,009,981).

This rejection is also respectfully traversed.

Matsubara employs a photosensitive diazo compound as an essential component. In contrast, the present composition does not contain a photosensitive diazo compound. Note the "consisting essentially of" terminology defining the composition of claim 1. A negative photosensitive composition containing photosensitive diazo compound as in Matsubara and a negative photosensitive resin composition such as Pine or the present invention (basically containing a resin, a polymerization monomer and a photopolymerization initiator) are very different materials that form images on distinctly different principles from each other as described below.

In the former negative photosensitive resin composition containing a photosensitive diazo compound, the diazo compound (a diazonium salt) absorbs light to produce an aromatic radical cation, whereby an anion forming the salt removes a hydrogen atom from a hydroxyl group on the side chain of a hydroxyl group containing polymer, which coexists in the composition with the diazo compound, thereby producing an oxygen radical on the side chain of the polymer. In consequence, the aromatic radical cation bonds to the oxygen radical, to form a crosslinked polymer, thereby forming a negative image.

On the other hand, in the latter negative photosensitive resin composition basically containing a resin, a polymerizable monomer and a photopolymerization initiator, the photopolymerization initiator absorbs light to produce a radical. The radical attacks an unsaturated bond in the polymerizable monomer, whereby a chain polymerization reaction occurs with the polymerizable monomer, thereby forming a negative image.

As discussed above, the former and the latter are materials that form images on distinctly different principles from each other, and this is well known to one of ordinary skill in the art.

Therefore, those skilled in the art would not be motivated to use any additives from the diazo system of Matsubara in the composition of Pine or the present invention.

Furthermore, in Matsubara, benzenesulfonic acid and naphthalenesulfonic acid are exemplified as stabilizers. Therefore, it would not have been obvious to those skilled in the art to expect that the latter negative photosensitive resin composition basically containing a resin, a polymerization monomer and a photopolymerization initiator, is able to exhibit increased depth of non-printing area merely by adding those compounds from a completely different system in the specified small amount.

As discussed above, the composition described in Matsubara is very different from those of Pine and the present invention. Therefore, using additives described in Matsubara in the composition of Pine would not be rendered obvious to those skilled in the art. Even if the additives in Matsubara are used for the composition of Pine, those skilled in the art would not be motivated to make the present invention by use of the additives in the defined ranges, so as to yield the effects of the present invention i.e. to deepen the non-printing area, from such references.

In view of the above, claim 1 and claims 2-4, all of which depend from claim 1 are unobvious from Pine in view of Matsubara.

For the foregoing reasons, it is apparent that the rejections on prior art are untenable and should be withdrawn.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **“Version with markings to show changes made.”**

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claim 1 has been amended as follows:

1. (Twice Amended) A photosensitive resin plate comprising a support having formed thereon directly or via an adhesive layer a photosensitive layer of from 0.45 to 0.8 mm in thickness comprising a negative working photosensitive resin composition consisting essentially of

- (A) a film-forming polymer,
- (B) an unsaturated compound having a radical polymerizable ethylenic double bond,
- (C) a photopolymerization initiator in an amount of 0.5 - 5 wt% based on the weight of the photosensitive resin composition components (A) to (E),
- (D) a thermal polymerization inhibitor, and
- (E) at least one member selected from compounds represented by following formula (I):



wherein -X represents -OR², -COOH, -SO₃H, -CONHR², -COR², -HNCONHR², or -HNCOOR²; R¹ and R², which may be the same or different, each represents a hydrogen atom, a substituted or unsubstituted, saturated or unsaturated hydrocarbon group, provided that it does not contain a radical polymerizable ethylenic double bond, a substituted or unsubstituted alicyclic hydrocarbon group, a substituted or unsubstituted aromatic hydrocarbon group, or a heterocyclic group, wherein said hydrocarbon group, alicyclic hydrocarbon group, aromatic hydrocarbon group, or the heterocyclic group may have an ether bond in the chain, provided that when -X is -OH, the R¹ represents a group other than a hydrogen atom and an aromatic hydrocarbon group provided that component (E) is not benzophenone and is different from component (C), in an amount [a range] of from 0.001 to 0.3% by weight based on the weight of the photosensitive resin composition components (A) to (E).



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